WHAT IS CLAIMED IS:

1. An image processing method comprising:

a search step of searching for original digital data stored in storage means on the basis of an input image;

an extraction step of extracting difference information by comparing the original digital data retrieved in the search step and the input image;

a vectorization step of converting the difference information extracted in the extraction step into vector data; and

a composition step of compositing the difference information that has been converted into the vector data to the original digital data.

2. The method according to claim 1, further comprising a storage step of storing new digital data which is generated as a result of the composition process in the composition step in the storage means.

3. The method according to claim 1, wherein the search step includes a step of recognizing an identifier which is appended to the input image and indicates a storage address of the original digital data, and searching for the original digital data on the basis of the recognition result of the identifier.

4. The method according to claim 1, wherein the vectorization step includes a step of executing

vectorization on the basis of a character recognition result of the difference information.

5. The method according to claim 1, wherein the vectorization step includes a step of executing vectorization by generating outline data based on outlines of the difference information.

6. The method according to claim 1, further comprising a checking step of checking whether or not to inhibit information about the retrieved original digital data from being changed, and wherein if it is determined in the checking step that a change in information is not inhibited, the difference data extracted in the extraction step is converted into vector data in the vectorization step, and the difference information that has been converted into the vector data is composited to the original digital data in the composition step, and if it is determined in the checking step that a change in information is inhibited, the difference information extracted in the extraction step and information other than the difference information which is included in the input image are converted into vector data in the vectorization step.

7. The method according to claim 2, further comprising a print control step of printing out the digital data stored in the storage step while appending information indicating a storage address of that digital data to the digital data.

8. The method according to claim 1, further comprising a storage step of storing the extracted difference information as an independent file, and wherein the difference information as the independent file is stored in a format associated with the original digital data, and is composited and output in the composition step when the difference information is to be printed out.

9. The method according to claim 1, further comprising a format conversion step of converting the new digital data which is generated by the composition process in the composition step into a prescribed format that an existing document creation application can handle.

10. The method according to claim 1, further comprising a vectorization step of converting the entire input image into vector data when no original digital file can be retrieved in the search step.

11. An image processing computer program comprising:

a code for implementing a search step of searching for original digital data stored in storage means on the basis of an input image;

a code for implementing an extraction step of extracting difference information by comparing the original digital data retrieved in the search step and the input image;

a code for implementing a vectorization step of converting the difference information extracted in the extraction step into vector data; and

a code for implementing a composition step of compositing the difference information that has been converted into the vector data to the original digital data.

12. An image processing system comprising:

search means for searching for original digital data stored in storage means on the basis of an input image;

extraction means for extracting difference information by comparing the original digital data retrieved by said search means and the input image;

vectorization means for converting the difference information extracted by said extraction means into vector data; and

composition means for compositing the difference information that has been converted into the vector data to the original digital data.

13. An image processing method comprising:

a search step of searching for an original data file corresponding to an input image;

a checking step of checking, based on a user's instruction, whether the input image is to be converted into vector data immediately or later; and

a vectorization step of converting the input image, the original data file of which cannot be retrieved, into vector data,

wherein the vectorization step includes a step of immediately converting the input image into vector data when it is determined in the checking step that the input image is to be converted into vector data immediately, and converting, when it is determined in the checking step that the input image is to be converted into vector data later, the input image into vector data when a predetermined condition is met.

14. The method according to claim 13, wherein the predetermined condition is met when a load on image processing means is light.

15. The method according to claim 13, wherein the checking step includes a step of registering status based on the user's instruction in a vectorization process table in association with the input image.

16. The method according to claim 13, further comprising a storage step of storing the input image that has been converted into the vector data in a database.

17. An image processing system comprising:

search means for searching for an original data file corresponding to an input image;

checking means for checking, based on a user's instruction, whether the input image is to be converted into vector data immediately or later; and

vectorization means for converting the input image, the original data file of which cannot be retrieved, into vector data,

wherein when said checking means determines that the input image is to be converted into vector data immediately, said vectorization means immediately converts the input image into vector data, and when said checking means determines that the input image is to be converted into vector data later, said vectorization means converts the input image into vector data when a predetermined condition is met.

18. A computer program comprising:

a code for implementing a search step of searching for an original data file corresponding to an input image;

a code for implementing a checking step of determining, based on a user's instruction, whether the input image is to be converted into vector data immediately or later; and

a code for implementing a vectorization step of converting the input image, the original data file of which cannot be retrieved, into vector data,

wherein the vectorization step includes a step of immediately converting the input image into vector data

when it is determined in the checking step that the input image is to be converted into vector data immediately, and converting, when it is determined in the checking step that the input image is to be converted into vector data later, the input image into vector data when a predetermined condition is met.

19. A storage medium storing a computer program, said program comprising:

a code for implementing a search step of searching for an original data file corresponding to an input image;

a code for implementing a checking step of determining, based on a user's instruction, whether the input image is to be converted into vector data immediately or later; and

a code for implementing a vectorization step of converting the input image, the original data file of which cannot be retrieved, into vector data,

wherein the vectorization step includes a step of immediately converting the input image into vector data when it is determined in the checking step that the input image is to be converted into vector data immediately, and converting, when it is determined in the checking step that the input image is to be converted into vector data later, the input image into vector data when a predetermined condition is met.

20. An image processing method comprising:

a specific region designation step of designating a specific region of an input image; and

a vectorization step of converting an image of the designated specific region into vector data.

21. The method according to claim 20, further comprising a region segmentation step of segmenting the input image into regions for respective properties, and

wherein the specific region designation step includes a step of designating a selected one of the regions segmented in the region segmentation step as the specific region.

22. The method according to claim 20, wherein the specific region designation step includes a step of displaying information indicating regions segmented in the region segmentation step and the input image, and designating a selected one of the displayed regions as the specific region.

23. The method according to claim 20, further comprising a file extraction step of extracting an original data file which has identical or similar contents from original data files registered in a database on the basis of the vector data obtained by converting the image data of the specific region.

24. The method according to claim 20, further comprising a file generation step of generating an image data file by compositing the vector data obtained by converting the image data of the specific region and

image data of regions other than the specific region in the input image.

25. The method according to claim 20, further comprising an application data conversion step of converting data in a predetermined format into a data format that application software can handle on the basis of the converted vector data of the specific region, and image data of regions other than the specific region.

26. The method according to claim 20, further comprising an image input step of inputting the input image obtained by scanning an image.

27. The method according to claim 20, wherein the vectorization step includes a step of converting image data of the input image into command definition type data such as code information, graphic information, function information, and the like.

28. An image processing system comprising:

specific region designation means for designating a specific region of an input image; and

vectorization means for converting an image of the designated specific region into vector data.

29. A computer executable program comprising:

a code for implementing a specific region designation step of designating a specific region of an input image; and

a code for implementing a vectorization step of converting an image of the designated specific region into vector data.

30. A computer readable storage medium storing a computer executable program of claim 29.